

MANAGEMENT ACTIONS FOR ALL ALTERNATIVES

ALTERNATIVE 1 No Action

Under the “No Action alternative the BLM will not implement any changes in the way that the Calico Basin Area, Red Springs, Calico Springs or Ash Springs are managed.

ALTERNATIVE 2

Issue 1: Protection of Sensitive Species – What measures should be taken to promote biodiversity and protect rare endemics and species of concern?

Action 1.1

Expand the current post and pole fencing at Red Spring to incorporate the spring source.

Rational for Action 1.1

This action will help to protect the Spring Snail from burro trampling and recreational activities and will also promote the spring snail habitat vegetative community to re-establish itself at the spring source.

Action 1.2

Expand the current post and pole fencing to incorporate the entire alkaline meadow.

Rational for Action 1.2

This action will allow the Mariposa Lily the ability to expand its population into its total potential alkaline habitat.

Action 1.3

Construct post and pole fencing around the white bearpoppy population at Calico Spring.

Rational for Action 1.3

This action will help preserve and protect the population of white bear poppy from burros and recreation activities.

Issue 2:

Restoration of Red Spring Riparian Area- What measures should be taken to restore Red Springs to its maximum habitat potential while still providing interpretation and recreation for the visitors.

Action 2.1

Expand the current fencing to include the spring source and the surrounding alkaline meadow.

Rational for Action 2.1

This action will help to protect the Spring Snail from burro trampling and recreational activities and will also promote the spring snail habitat vegetative community to re-establish itself at the spring source. This action will also allow the Mariposa Lily the ability to expand its population into its total potential alkaline habitat.

Action 2.2

Use a soil aerator, to remove small plugs of soil three inches deep along the northwestern section of the alkaline meadow.

Rational for Action 2.2

This action will allow the soils to aerate and decompact. This will allow the mariposa lily to repopulate this area by either natural means or through replanting.

Action 2.3

Redirect spring channel flow to its original flow regime.

Rational for Action 2.3

This action will return Red Spring to its historic and natural flow pattern. It will aide in the recolonization of previously disturbed riparian habitat.

Action 2.4

Remove and rehabilitate picnic areas within the fencing perimeter.

Rational for Action 2.4

This action helps to restrict activities within fenced area to boardwalk only. Removal of picnicking will help protect the vegetation and wildlife within the enclosure.

Action 2.5

Establish new picnic areas outside of fencing.

Rational for Action 2.5

Red Springs is a popular picnic area and is one of only 2 picnic sites in all of Red Rock Canyon NCA. This enjoyable past time should be allowed to continue, but must be relocated to areas outside of the enclosure.

Action 2.6

Remove and rehabilitate dirt road and parking areas within the fencing perimeter.

Rational for Action 2.6

The current location of the Red Springs road and associated parking areas all fall within the proposed new fence line. Both the upper parking area and the upper portion of Red Springs road are wet year around suggesting that they are part of the natural spring seep.

Action 2.7

Establish new parking area for public access to Red Spring and other areas in Calico Basin. The parking area will be paved and have trailhead access for hiking and horse back riding.

Rational for Action 2.7

Existing parking areas will be eliminated so a new parking area outside of fence line will be necessary.

Action 2.8

Remove and rehabilitate trails within the perimeter fencing.

Rational for Action 2.8

All areas within the fence line will be considered sensitive. In order for proper rehabilitation, impacts to this area must be kept to a minimum.

Action 2.9

Establish a trail system that incorporates the parking area, picnic areas, interpretive boardwalk and other trails in the area.

Rational for Action 2.9

By tying all trails into a central trail system, and tying this trail system to the parking area, trail braiding can be kept to a minimum.

Action 2.10

Establish an interpretation program with interpretive signs on the boardwalk and hiking trails.

Rational for Action 2.10

In order to gain compliance in sensitive areas, an organized and informative trail system is necessary. Educating the public about the reasons for these sensitive areas will help to reduce impacts.

Action 2.11

Install a water trough below Red Springs, outside of fenced area.

Rational for Action 2.11

Red Spring has the highest flow rates and discharge of all 3 springs in Calico Basin. By installing a water trough, the burros will still have access to water at Red Spring, thereby not creating an increased demand at Calico and Ash Spring.

Issue 3: Protection of Calico Spring- What measures should be taken to protect Calico Spring from burro and recreation impacts.

Action 3.1 Construct fencing around portions of Calico Spring that capture the crucial habitat of the white bearpoppy.

Rational for Action 3.1

This action will help preserve and protect the population of white bear poppy from burros and recreation activities.

Action 3.2

Remove and rehabilitate trails within fence enclosure.

Rational for Action 3.2

Removal of trails within the fence enclosure will help eliminate the temptation to walk on sensitive bearpoppy populations.

Action 3.3 Establish interpretive trail that ties in with Red Springs Trail Network.

Rational for Action 3.3

An interpretive trail will help educate the public about the white bearpoppy and also reduce trail braiding in the area.

Issue 4: Protection of Ash Spring- What protection should be taken given to Ash Spring in regards to recreation impacts.

Action 4.1

Construct a post and cable fence along Sandstone Drive.

Rational for Action 4.1

Construction of a post and cable fence along Sandstone Drive will help eliminate off highway vehicle use in and around Ash Spring.

Action 4.2

Re-align and establish interpretive trail in the Ash Spring.
Tie the trail system into the Red Springs Trail Network.

Rational for Action 4.2

An interpretive trail will help educate the public about the sensitivity of Ash Spring, the Wild Horse and Burro Management Area and also reduce trail braiding.

Issue 5: **Wild Horse and Burro Management- How should burros be managed in Calico Basin and what water sources should be available for the burros.**

Action 5.1

Construct post and pole fencing around Red Spring to keep burros out.

Rational for Action 5.1

Red Spring is used by burros as a water source. This use has negative impacts on both the endemic spring snail population and the sensitive mariposa lily population from grazing and trampling. By constructing a fence around all of Red Spring, these sensitive populations will have a greater chance of expanding into their total potential habitat.

Action 5.2

Construct post and pole fencing around the portion of Calico Spring that incorporates the population of white bearpoppy. Leave most of the spring open to serve as a water source for wild burros.

Rational for Action 5.2

The population of white bear poppy occupies a small area on the hillside just above Calico Spring. By fencing just this small area, the population will be protected from burro grazing and trampling. Burros will still be able to use Calico Spring as a water source both above and below the enclosure.

Action 5.3

There will be no fencing projects done at Ash Spring. This area will remain as part of the Red Rock Canyon NCA Herd Management.

Rational for Action 5.3

The upper portion of Ash Spring is within the Red Rock Canyon NCA HMA. There is no sensitive or endemic populations in Ash Spring therefore no fencing is warranted.

Action 5.4

Install a guzzler below Red Springs outside of fenced area.

Rational for Action 5.4

Red Spring has the highest flow rates and discharge of all 3 springs in Calico Basin. By installing a guzzler, the burros will still have access to water at Red Spring, thereby not creating an increased demand at Calico and Ash Spring.

Issue 6:

Recreational Uses-What kinds of recreational opportunities should be offered to visitors? What measures should be taken to provide for those recreational opportunities, while limiting impacts to sensitive areas. What measures should be taken to ensure adequate parking with the least impact on the riparian area and the residence of Calico basin.

Action 6.1

Construct a large (125 car) parking lot adjacent to the lower (northern most) portion of the Red Springs road. This parking lot will be paved, painted and bordered with a post and cable fence. This lot will be designed for horse trailers as well as vehicles.

Rational for Action 6.1

Current parking in Calico Basin is disorganized and environmentally damaging. Vehicles park randomly along Sandstone Drive, Red Spring Road and Calico Basin Drive. With the removal of parking areas in Red Spring a new parking area is needed. The location of the large parking area at Red Spring is ideal in that it will be hidden from the residence of Calico Basin. The excavated soil can be used to backfill in areas of Red Spring in need of rehabilitation.

The paved, painted and fenced parking area at Red Spring will maximize parking spaces for recreational users, reduce dust in the air, limit habitat damage from parked vehicles and provide parking spaces for horse trailers.

Action 6.2

Construct a small trailhead parking lot on BLM land on the north side of Calico Basin Drive. This parking lot will be a gravel lot with post and cable fencing. The lot will not be designed for horse trailers.

Rational for Action 6.2

This small gravel parking lot will provide access to the Gene's Trailhead. This will help alleviate congestion in the Calico Basin/Red Spring area by allowing access to Kraft Mountain via a different trail. The parking will be for hikers/climbers vehicle not horse trailers.

Action 6.3

Establish a hiking and equestrian trail network that runs from the southern end of Calico Basin to the Northern end of Calico Basin. The trail system will include the Red Springs Interpretive Trail and Boardwalk, the Kraft Mountain Trail, Gene's Trail, the Ash Spring Trail, the Girl Scout Trail, the Calico Spring Trail and the Calico Overlook Trail.

Rational for Action 6.3

In order to gain compliance in sensitive areas, an organized and informative trail system is necessary. Educating the public about the reasons for these sensitive areas will help to reduce impacts. By tying all trails into a central trail system, and tying this trail system to the parking area, trail braiding can be kept to a minimum.

Action 6.4

Construct a wooden boardwalk within the fenced Red Springs riparian area.

Rational for Action 6.4

A wooden boardwalk within the fenced area at Red Springs will help educate the public, with an up-close feel, to the sensitivity of Red Spring. Allowing the public access into the enclosure on a defined path will eliminate the desire to jump over the fence and trample sensitive areas. A wooden boardwalk can also enhance the interpretive experience.

Action 6.5

Construct 6 picnic sites in the Red Springs area. These sites will consist of 2 cement pads, 2 picnic tables, 2 grills and 2 trash receptacles.

Rational for Action 6.5

Red Springs is a popular picnic area and is one of only 2 picnic sites in all of Red Rock Canyon NCA. By keeping the picnic sites outside of the fencing this will help reduce impacts to the riparian area. The current picnicking use at Red Spring is greater than sites available. Doubling the number of sites should help deal with the increased pressure.

Action 6.6

Construct two additional handicap restroom facilities.

Rational for Action 6.6

The two existing restrooms will remain where they are. Adding a restroom at the new parking area and a restroom on the west side (picnic areas) will give the visitor the additional coverage necessary.

Issue 7:

Cultural Resources-How should cultural and paleontological resources be managed. What measures should be taken to provide interpretation and viewing of these cultural resources.

Action 7.1

Incorporate selected cultural sites into the interpretive trail system.

Rational for Action 7.1

A trail system will help to minimize visitation to sensitive sites and reduce the amount of trail braiding in and around cultural areas of interest.

Action 7.2

Provide interpretive panels to educate the public on the significance of each site.

Rational for Action 7.2

Cultural resources will be posted with signs that discuss appropriate visitor behavior at these sites and reference the State and Federal laws protecting archaeological resources on public lands. Interpretation of the sites will incorporate information from Native American tribes with ties to Calico Basin historically and traditionally.

ALTERNATIVE 3

Issue 1: Protection of Sensitive Species – What measures should be taken to promote biodiversity and protect rare endemics and species of concern?

Action 1.1

Expand the current post and pole fencing at Red Spring to incorporate the spring source.

Rational for Action 1.1

This action will help to protect the Spring Snail from burro trampling and recreational activities and will also promote the spring snail habitat vegetative community to re-establish itself at the spring source.

Action 1.2

Expand the current post and pole fencing to incorporate the entire alkaline meadow.

Rational for Action 1.2

This action will allow the Mariposa Lily the ability to expand its population into its total potential alkaline habitat.

Action 1.3

Construct post and pole fencing around all of Calico Spring.

Rational for Action 1.3

This action will help preserve and protect the population of white bear poppy and associated riparian area from burros and recreation activities.

Issue 2:

Restoration of Red Spring Riparian Area- What measures should be taken to restore Red Springs to its maximum habitat potential while still providing interpretation and recreation for the visitors.

Action 2.1

Expand the current fencing to include the spring source and the surrounding alkaline meadow.

Rational for Action 2.1

This action will help to protect the spring snail from burro trampling and recreational activities and will also promote the spring snail habitat vegetative community to re-establish itself at the spring source. This action will also allow the mariposa lily the ability to expand its population into its total potential alkaline habitat.

Action 2.2

Use a soil aerator, to remove small plugs of soil three inches deep along the northwestern section of the alkaline meadow.

Rational for Action 2.2

This action will allow the soils to aerate and decompact. This will allow the mariposa lily to repopulate this area by either natural means or through replanting.

Action 2.3

Redirect spring channel flow to its original flow regime.

Rational for Action 2.3

This action will return Red Spring to its historic and natural flow pattern. It will aide in the recolonization of previously disturbed riparian habitat.

Action 2.4

Remove and rehabilitate picnic areas within the fencing perimeter.

Rational for Action 2.4

This action helps to restrict activities within fenced area to boardwalk only. Removal of picnicking will help protect the vegetation and wildlife within the enclosure.

Action 2.5

Establish new picnic areas outside of fencing.

Rational for Action 2.5

Red Springs is a popular picnic area and is one of only 2 picnic sites in all of Red Rock Canyon NCA. This enjoyable past time should be allowed to continue, but must be relocated to areas outside of the enclosure.

Action 2.6 Remove and rehabilitate dirt road and parking areas within the fencing perimeter.

Rational for Action 2.6

The current location of the Red Springs road and associated parking areas all fall within the proposed new fence line. Both the upper parking area and the upper portion of Red Springs road are wet year around suggesting that they are part of the natural spring seep.

Action 2.7 Establish new parking area for public access to Red Spring and other areas in Calico Basin. The parking area will be paved and have trailhead access for hiking and horse back riding.

Rational for Action 2.7

Existing parking areas will be eliminated so a new parking area outside of fence line will be necessary.

Action 2.8

Remove and rehabilitate trails within the perimeter fencing.

Rational for Action 2.8

All areas within the fence line will be considered sensitive. In order for proper rehabilitation impacts to this area must be kept to a minimum.

Action 2.9

Establish a trail system that incorporates the parking area, picnic areas, interpretive boardwalk and other trails in the area.

Rational for Action 2.9

By tying all trails into a central trail system, and tying this trail system to the parking area, trail braiding can be kept to a minimum.

Action 2.10 Establish an interpretation program with interpretive signs on the boardwalk and hiking trails.

Rational for Action 2.10

In order to gain compliance in sensitive areas, an organized and informative trail system is necessary. Educating the public about the reasons for these sensitive areas will help to reduce impacts.

Issue 3: Protection of Calico Spring- What measures should be taken to protect Calico Spring from burro and recreation impacts.

Action 3.1 Construct fencing around all of Calico Spring.

Rational for Action 3.1

This action will help preserve and protect the population of white bear poppy and associated riparian areas from burros and recreation activities.

Action 3.2

Remove and rehabilitate trails within fence enclosure.

Rational for Action 3.2

Removal of trails within the fence enclosure will help eliminate the temptation to walk on sensitive bearpoppy populations or riparian vegetation.

Action 3.3 Establish interpretive trail that ties in with Red Springs Trail Network.

Rational for Action 3.3

An interpretive trail will help educate the public about the white bearpoppy, riparian areas and also help reduce trail braiding.

Issue 4: Protection of Ash Spring- What protection should be taken given to Ash Spring in regards to recreation impacts.

Action 4.1

Construct a post and pole fence around the lower portion of Ash Spring.

Rational for Action 4.1

The upper portion of Ash Spring is within the Red Rock Canyon NCA. Fencing the lower portion would protect the riparian area while still allowing burro's access to water and vegetation in the upper portion of Ash Spring.

Action 4.2

Construct a post and cable fence along Sandstone Drive.

Rational for Action 4.2

Construction of a post and cable fence along Sandstone Drive will help eliminate off highway vehicle use in and around Ash Spring.

Action 4.3

Re-align and establish interpretive trail in the Ash Spring. Tie the trail system into the Red Springs Trail Network.

Rational for Action 4.3

An interpretive trail will help educate the public about the sensitivity of Ash Spring, the Wild Horse and Burro Management Area and also reduce trail braiding.

Issue 5: Wild Horse and Burro Management- How should burros be managed in Calico Basin and what water sources should be available for the burros.

Action 5.1

Construct post and pole fencing around Red Spring to keep burros out.

Rational for Action 5.1

Red Spring is used by burros as a water source. This use has negative impacts on both the endemic spring snail population and the sensitive mariposa lily population from grazing and trampling. By constructing a fence around all of Red Spring, these sensitive populations will have a greater chance of expanding into their total potential habitat.

Action 5.2

Construct post and pole fencing around all of Calico Spring.

Rational for Action 5.2

This action will help preserve and protect the population of white bear poppy and associated riparian area from burros.

Action 5.3

Construct a post and pole fence around the lower portion of Ash Spring.

Rational for Action 5.3

The upper portion of Ash Spring is within the Red Rock Canyon NCA. Fencing the lower portion would protect the riparian area while still allowing burro's access to water and vegetation in the upper portion of Ash Spring.

Issue 6: **Recreational Uses-**What kinds of recreational opportunities should be offered to visitors? What measures should be taken to provide for those recreational opportunities, while limiting impacts to sensitive areas. What measures should be taken to ensure adequate parking with the least impact on the riparian area and the residence of Calico basin.

Action 6.1

Construct a large (60 car) parking lot adjacent to the lower (northern most) portion of the Red Springs road. This parking lot will be paved, painted and bordered with a post and cable fence. This lot will be designed for horse trailers as well as vehicles.

Rational for Action 6.1

Current parking in Calico Basin is disorganized and environmentally damaging. Vehicles park randomly along Sandstone Drive, Red Spring Road and Calico Basin Drive. With the removal of parking areas in Red Spring a new parking area is needed. The location of the large parking area at Red Spring is ideal in that it will be hidden from the residence of Calico Basin. The excavated soil can be used to backfill in areas of Red Spring in need of rehabilitation.

The paved, painted and fenced parking area at Red Spring will maximize parking spaces for recreational users, reduce dust in the air, limit habitat damage from parked vehicles and provide parking spaces for horse trailers.

Action 6.2

Construct a trailhead parking lot on BLM land on the north side of Calico Basin Drive. This parking lot will be a gravel lot with post and cable fencing. The lot will large enough to accommodate a couple of horse trailers.

Rational for Action 6.2

This small gravel parking lot will provide access to the Gene's Trailhead. This will help alleviate congestion in the Calico Basin/Red Spring area by allowing access to Kraft Mountain via a different trail. The parking lot will provide trailhead access to hikers, climbers and horseback riders.

Action 6.3

Construct a small trailhead parking lot on BLM land on the west side of Sandstone Road. This parking lot will be a gravel lot with post and cable fencing. The lot will provide trailhead access for hikers and climbers but not horses.

Rational for Action 6.3

This small gravel parking lot will provide access to the Calico Spring Trailhead. This additional parking will help alleviate congestion in the Red Spring area by allowing access to the northwestern portion of Calico Basin via a different trailhead. The parking will be for hiker/climber vehicles not horse trailers.

Action 6.4

Establish a hiking and equestrian trail network that runs from the southern end of Calico Basin to the Northern end of Calico Basin. The trail system will include the Red Springs Interpretive Trail and Boardwalk, the Kraft Mountain Trail, Gene's Trail, the Ash Spring Trail, the Girl Scout Trail, the Calico Spring Trail and the Calico Overlook Trail.

Rational for Action 6.3

In order to gain compliance in sensitive areas, an organized and informative trail system is necessary. Educating the public about the reasons for these sensitive areas will help to reduce impacts. By tying all trails into a central trail system, and tying this trail system to the parking area, trail braiding can be kept to a minimum.

Action 6.4

Construct a wooden boardwalk within the fenced Red Springs riparian area.

Rational for Action 6.4

A wooden boardwalk within the fenced area at Red Springs will help educate the public, with an up-close feel, to the sensitivity of Red Spring. Allowing the public access into the enclosure on a defined path will eliminate the desire to jump over the fence and trample sensitive areas. A wooden boardwalk can also enhance the interpretive experience.

Action 6.5

Construct 6 picnic sites in the Red Springs area. These sites will consist of 3 cement pads, 3 picnic tables, 3 grills and 3 trash receptacles.

Rational for Action 6.5

Red Springs is a popular picnic area and is one of only 2 picnic sites in all of Red Rock Canyon NCA. By keeping the picnic sites outside of the fencing this will help reduce impacts to the riparian area. The current picnicking use at Red Spring is greater than sites available. Tripling the number of sites should help deal with the increased pressure.

Action 6.6

Construct four additional handicap restroom facilities.

Rational for Action 6.6

The two existing restrooms will remain where they are. Adding a restroom at the new parking area and a restroom on the west side (picnic areas) will give the visitor to Red Spring the additional coverage necessary. Adding a restroom at the two new parking areas (Sandstone Drive and Calico Basin Drive) would allow for facilities at all trailheads.

Issue 7: Cultural Resources-How should cultural and paleontological resources be managed. What measures should be taken to provide interpretation and viewing of these cultural resources.

Action 7.1

Incorporate selected cultural sites into the interpretive trail system.

Rational for Action 7.1

A trail system will help to minimize visitation to sensitive sites and reduce the amount of trail braiding in and around cultural areas of interest.

Action 7.2

Provide interpretive panels to educate the public on the significance of each site.

Rational for Action 7.2

Cultural resources will be posted with signs that discuss appropriate visitor behavior at these sites and reference the State and Federal laws protecting archaeological resources on public lands. Interpretation of the sites will incorporate information from Native American tribes with ties to Calico Basin historically and traditionally.

ALTERNATIVE 4

Issue 1: Protection of Sensitive Species – What measures should be taken to promote biodiversity and protect rare endemics and species of concern?

Action 1.1

Remove current fencing at Red Spring.

Rational for Action 1.1

This action will help remove Government structures from Red Springs. Removal of the fence may help diffuse impacts to the area as a whole.

Action 1.2

Remove Red Springs Road.

Rational for Action 1.2

This action will help remove Government structures from Red Springs. Removal of the road may help diffuse impacts to the area as a whole.

Action 1.3

Remove parking, restrooms and picnic areas.

Rational for Action 1.3

This action will help remove Government structures from Red Springs. Removal of parking, restrooms and picnic areas may help diffuse impacts to the area as a whole.

Issue 2: **Restoration of Red Spring Riparian Area-** What measures should be taken to restore Red Springs to its maximum habitat potential while still providing interpretation and recreation for the visitors.

Action 2.1

Remove current fencing at Red Spring.

Rational for Action 2.1

This action will help remove Government structures from Red Springs. Removal of the fence may help diffuse impacts to the area as a whole.

Action 2.2

Remove Red Springs Road.

Rational for Action 2.2

This action will help remove Government structures from Red Springs. Removal of the road may help diffuse impacts to the area as a whole.

Action 2.3

Remove parking, restrooms and picnic areas.

Rational for Action 2.3

This action will help remove Government structures from Red Springs. Removal of parking, restrooms and picnic areas may help diffuse impacts to the area as a whole.

Issue 3: Protection of Calico Spring- What measures should be taken to protect Calico Spring from burro and recreation impacts.

Action 3.1

Remove current parking area on Sandstone Dr.

Rational for Action 3.1

Removal of the parking area may help diffuse impacts to the area as a whole.

Action 3.2

Construct a post and cable fence along Sandstone Drive.

Rational for Action 3.2

Construction of a post and cable fence along Sandstone Drive will help eliminate off highway vehicle use in and around Calico Spring.

Issue 4: Protection of Ash Spring- What protection should be taken given to Ash Spring in regards to recreation impacts.

Action 4.1

Construct a post and cable fence along Sandstone Drive.

Rational for Action 4.1

Construction of a post and cable fence along Sandstone Drive will help eliminate off highway vehicle use in and around Ash Spring.

Issue 5: Wild Horse and Burro Management- How should burros be managed in Calico Basin and what water sources should be available for the burros.

Action 5.1

Expand the RRCNCA Herd Management Area to include all of Calico Basin.

Rational for Action 5.1

This action will allow the burro population access to all springs in the Calico Basin area.

Issue 6: Recreational Uses-What kinds of recreational opportunities should be offered to visitors? What measures should be taken to provide for those recreational opportunities, while limiting impacts to sensitive areas. What measures should be taken to ensure adequate parking with the least impact on the riparian area and the residence of Calico basin.

Action 6.1

Construct a trailhead parking area at the entrance to Calico Basin along HWY 159. The parking lot will be paved and accessible to horse trailers.

Rational for Action 6.1

A parking area on HWY 159 will eliminate the parking congestion in the Calico Basin Area.

Issue 7: Cultural Resources-How should cultural and paleontological resources be managed. What measures should be taken to provide interpretation and viewing of these cultural resources.

Action 7.1

Do not provide trails or interpretation to any cultural sites.

Rational for Action 7.1

Visitation may decrease due to limited access into Calico Basin.